



Alanya Alaaddin Keykubat University

Rafet Kayış Faculty of Engineering

Department of Genetics and Bioengineering

The Title of Graduation Project

Name Surname

*A thesis submitted in fulfillment of the requirements for the
Bachelor's Degree*

Month Year

Abstract

This section offers a comprehensive summary of the work, covering the aims and objectives of the project, the significance of the work, key findings, overall conclusions, and future prospects. Its content is restricted to this page.

Acknowledgements

The author is free to acknowledge individuals who contributed during the graduation project in any manner they choose. Its content is restricted to this page.

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(Please omit this generic table of contents during the writing process. Ensure that the page numbers are in Roman numerals up to the "Thesis Outline" section. From the "Thesis Outline" onward, use Arabic numerals for page numbering.)

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List of Abbreviations

(Please omit this generic list of abbreviations during the writing process. Ensure that all abbreviations used in the main text are listed below in alphabetical order along with their meanings.)

CNT Carbon nanotube

GA Generic abbreviations

List of Figures

Figure 1.1: The specific caption of the figure as presented in the main text. The first number indicates the chapter to which the figure belongs, and the second number indicates the figure's order within the main text. _____ 14

Figure 2.3: For example, Figure 2.3 indicates that the figure belongs to Chapter 2, and it is the third figure within Chapter 2. _____ ??

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Table 1.1: IBOA and TMPTA ratio (% wt), average particle size (D_p), and polydispersity index (PDI) of IBOA microparticles. _____14

Table 1.2: Similar to figures, each reference follows the format "ChapterNumber.FigureNumber".__15

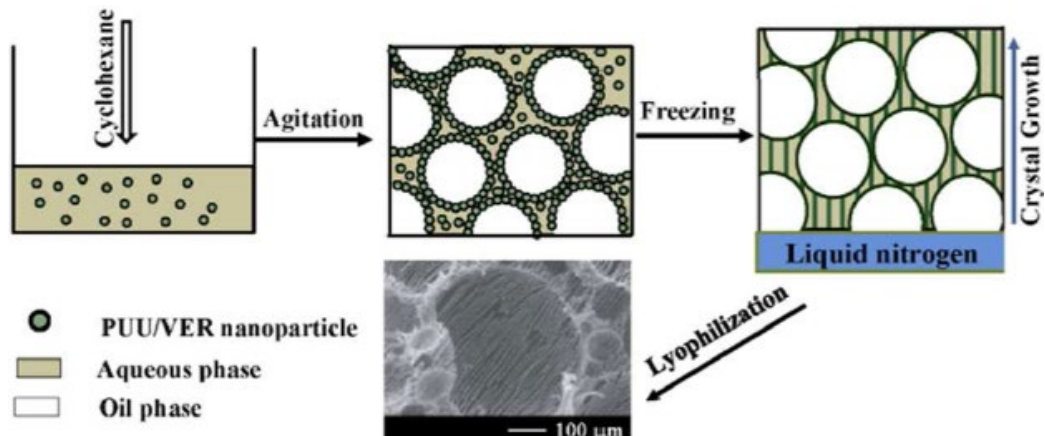
Thesis Outline

This section offers a brief summary of each chapter in the thesis. Its content is restricted to this page.

The Title of This Chapter

Abstract

This section offers the summary of the thesis in a maximum of 250 words and provide a graphical abstract. The graphical abstract should be a single image that effectively summarizes the content of this section. For instance:



Please ensure that the "Keywords" section is provided below as follows:

Keywords: Graduation project, thesis, bioengineering (5-10 keywords)

1.1 Introduction to Thesis

The thesis for the graduation project is a requirement for obtaining the BSc degree in Genetics and Bioengineering. Consequently, students are expected to both write and submit their thesis. The format and evaluation criteria for the thesis are outlined in the following sections.

1.2 Format of the Thesis

The layout: normal margin, portrait orientation, A4 size and single column.

The font is Calibri and, the colour is black and the font size is 11 in the main text and 20 in the headings such as acknowledgement, table of content, chapter names etc. Subheadings are similar to the main text format; however, they should be placed 2.54 cm away from the heading number (which is equivalent to double tab spacing in the default setting). Ensure that all the headings and subheadings are bold.

Please avoid using bold, italic and underline in the main text. Italic can only be used if necessary; such as species name (*Arabidopsis thaliana*), when you refer a specific report in the main text (Zhu *et al.*), or the abbreviations of quantitative terms (D_p , while referring average particle size).

Please ensure that the paragraph orientation is “justify”, the line spacing is 1.5 and a single space between paragraphs. However, the main headings should be centred.

The page numbering is outlined in the Table of Content section.

1.2.1 Figures and Tables

Please ensure that all figures and tables referred to in the main text are placed immediately after the paragraph where they are first mentioned. Figures and tables should be located on the same page or at most the following page after the paragraph where they are first referenced. If necessary, paragraphs may be divided or figures resized to achieve this, ensuring that the figure remains clear after resizing.

Figure captions should be positioned below the figure, while table captions should be positioned above the table. The figure and table numbers should be bold, while the captions themselves should not be. Caption text should be in size 10 font, with a paragraph spacing of 1.15.

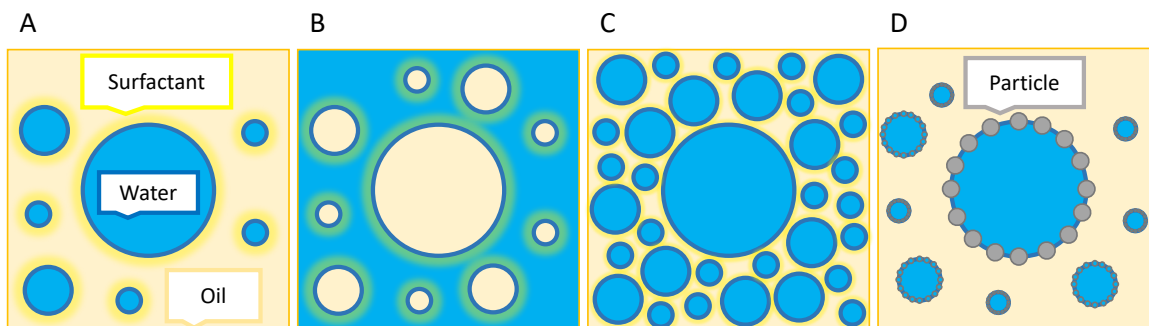


Figure 1.1: The classification of emulsions. (A) Surfactant-stabilized (conventional), w/o, LIPE (assuming that the internal phase volume is <33%), (B) o/w counterpart of A, (C) HIPE counterpart of A (assuming that the internal phase volume is >74%), (D) Pickering counterpart of A.

Table 1.1: IBOA and TMPTA ratio (% wt), average particle size (D_p), and polydispersity index (PDI) of IBOA microparticles.

ID	internal phase		continuous phase		D_p (nm)	PDI
	IBOA (%)	TMPTA (%)	Tween 20 ^a (%)	KPS ^b (%)		
IB-L	75	25	0.10	2	724	0.04
IB-M	75	25	0.50	2	198	0.03
IB-S	75	25	1.00	2	103	0.03

^aTween 20 concentration with respect to the continuous water phase (% wt). ^bKPS concentration with respect to the internal organic phase (% wt).

Figures adapted from other sources should be properly referenced as follows: “Adapted from [2]”.

1.2.2 Appendix

All the students are expected to confirm that the thesis provided is their original work. Therefore, the first appendix of the thesis should include the declaration of originality (see page).

The main text of the thesis should be clear and concise. However, students might have additional information that indirectly supports the arguments in the main text. If this information disrupts the readability of the thesis due to its length, it should be provided in the appendix section. This information can include raw data, images, mathematical equations, algorithms, and so on. If the student wishes to provide more than one appendix, each should be labelled as Appendix A, Appendix B, Appendix C, and so on.

1.2.3 References

In the main text, references should be provided in the format [1,2], following the Journal of Colloid and Interface Science (JCIS) style. In the reference section, each reference should include the author(s)

name(s), journal title or book title, chapter title or article title, year of publication, volume number or book chapter, and the article number or pagination. The use of DOI is highly encouraged.

In the reference section, the font size of references should be 10 with a line spacing of 1.15.

1.3 The Evaluation of the Thesis

The thesis is expected to represent the original work of the students. Any similarity between the thesis and existing literature above 25% is considered plagiarism and will result in failure in the Graduation Project. Students are required to showcase their understanding of the topic by producing a high-quality report.

The thesis evaluation may be conducted either solely by the supervisor or by a committee. Additionally, the evaluation can be based on a written report alone or include both a presentation and an interview, depending on the supervisor's decision. The criteria and corresponding scores are provided in the table below:

Table 1.2: The criteria and corresponding scores.

	Score
Aims and Objectives	10
Coherence	10
Literature Review	20
Materials and Methods	10
Interpretation of Results	10
Discussion of Results	20
Organization	10
Readability	10

The thesis must clearly outline its aims and objectives, and the subsequent content should align coherently with these stated aims. Properly referenced and up-to-date background information and literature reviews should be provided to ensure that readers unfamiliar with the topic can understand the context.

If the thesis is literature review-based, meaning there is no experimental work, students will not be evaluated on the "Materials and Methods" and "Discussion of Results" sections. Instead, the score for the literature review will be increased to 50, rather than the standard 20.

Detailed information about the materials used in the project should be provided, including the names of reagents, brands, specifications (if applicable), and providers. Similarly, methods should be described in detail to enable replication of the experiment by others.

Results should be presented clearly, utilizing appropriate statistical tools. These results should be compared with existing literature, discussing any similarities and/or differences observed.

The organization of the thesis includes the obedience to format. Readability includes writing errors and the coherence between sentences and paragraphs. Therefore, it is essential to proofread the thesis before submission.

Appendix A

(Please note that the heading should be "APPENDIX," if there is no further appendix in the thesis)

I, *your name*, hereby confirm that the thesis titled (*thesis name*) is my own original work. I affirm that the thesis solely consists of my own words. No one else authored the thesis, and I did not use generative artificial intelligence technologies to create any part of it.

Date

Student Number

Student Name

(Signature)

Appendix B

For instance, a MATLAB code used in the project is provided in the appendix section.

```
diameter = 372.4*1e-9;           % diameter of spheres
radius = diameter/2;           % radius of spheres
lambda=470*1e-9;              % wavelength of light in vacuum
ns=1.479;                      % refractive index of spheres
nb=1.339;                      % refractive index of background
ws=0.927*1e3;                 % specific weight of spheres
wb=1.0*1e3;                   % specific weight of background
concentration=0:0.00093:0.0465; % concentration of spheres
k= 2*pi*nb/lambda;
x=k*radius;                   % the size parameter
nr=ns/nb;
y=nr*x;
err=1e-8;
qs=0;                         % the scattering efficiency
gqs=0;
for n=1:100000
    snx=sqrt(pi*x/2)*besselj(n+0.5,x); % Riccati-Bessel functions
    sny=sqrt(pi*y/2)*besselj(n+0.5,y);
    cnx=-sqrt(pi*x/2)*bessely(n+0.5,x);
    zetax=snx+i*cnx;
    snxprime=-(n/x)*snx+sqrt(pi*x/2)*besselj(n-0.5,x);
    snyprime=-(n/y)*sny+sqrt(pi*y/2)*besselj(n-0.5,y);
    cnxprime=-(n/x)*cnx-sqrt(pi*x/2)*bessely(n-0.5,x);
    zetaxprime=snxprime+i*cnxprime;
    annum=snyprime*snx-nr*sny*sngxprime;
    anden=snyprime*zetax-nr*sny*zetaxprime;
    an=annum/anden;
    bnum=nr*snyprime*snx-sny*sngxprime;
    bden=nr*snyprime*zetax-sny*zetaxprime;
    bn=bnum/bden;
    qs1=(2*n+1)*(abs(an)^2+abs(bn)^2);
```

References

- [1] Ö. Öztürk, A.L. Lessl, M. Höhn, S. Wuttke, P.E. Nielsen, E. Wagner, U. Lächelt, Peptide nucleic acid-zirconium coordination nanoparticles, *Sci. Rep.* 13 (2023) 1–16. <https://doi.org/10.1038/s41598-023-40916-w>.
- [2] E. Durgut, C. Sherborne, B. Aldemir Dikici, G.C. Reilly, F. Claeysens, Preparation of Interconnected Pickering Polymerized High Internal Phase Emulsions by Arrested Coalescence, *Langmuir* 38 (2022) 10953–10962. <https://doi.org/10.1021/acs.langmuir.2c01243>.